AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY

RESPONSES TO PUBLIC MEETING QUESTIONS REGARDING THE MICROBIOLOGICAL DATA PROGRAM

20 NOVEMBER 2002

1. **Industry stakeholders are still concerned about the true objectives of MDP. What is the question or hypothesis being addressed by the MDP?**
   United Fresh Fruit and Vegetable Association
   International Fresh-cut Produce Association

The objective of Microbiological Data Program (MDP) is to provide reliable bench-mark data on fresh fruits and vegetables in the United States. It is intended as a baseline survey and is not a regulatory or an enforcement program. With sufficient data over time, we can establish what the microbial picture is at the wholesale point in the distribution chain. MDP will provide scientifically sound reference data that can be used to indicate trends. These baseline data should provide a clearer definition of the nature and scope of pathogenic organisms in the food supply and allow public health authorities and industry to be better positioned to address microbiological concerns that might surface.

2. **Antibiotic resistance testing is not appropriate for the MDP.**
   United Fresh Fruit and Vegetable Association

USDA is a member of the interagency Task Force on Antimicrobial Resistance established in 1999 to address antimicrobial resistance, an identified public health issue. As such, positive MDP samples are being sent to ARS for testing and these data will be added to the **National Antimicrobial Resistance Monitoring System** (NARMS) database. In response to industry's request that we work with academic institutions where expertise exists, AMS has teamed with Pennsylvania State University to conduct antibiotic resistance screens on positive cultures. These data will be part of the AMS, MDP database.

3. **Concern about introducing *Listeria monocytogenes* into the program.**
   United Fresh Fruit and Vegetable Association

At this time MDP is not planning to introduce *Listeria* testing into the testing profiles.

4. **AMS should encourage States not to act on positive results until confirmation of positives occurs.**
   United Fresh Fruit and Vegetable Association

AMS requires confirmation for all initial positive detections and encourages the States to await confirmation before assessing the findings. AMS actively works with the States to support the agricultural industry and clarify public health issues.

5. **Recommend the standardization of methods and sampling techniques.**
   United Fresh Fruit and Vegetable Association

Laboratory methods and sampling procedures are conducted in accordance with program Standard Operating Procedures (SOPs), which are published at http://www.ams.usda.gov/science/mpo/SOPs.htm. All program participants are required to adhere to these SOPs.

6. **Recommend peer and industry review in sampling and testing methods development.**
   United Fresh Fruit and Vegetable Association

AMS agrees that peer and industry comment on sample and test procedures is important. Methods and procedures are open to review by MDP participants and external experts in academia and industry, as appropriate.

7. **The Fruit and Vegetable Industry Advisory Committee was not supportive of MDP.**
   United Fresh Fruit and Vegetable Association

On October 31, 2002, AMS Administrator A. J. Yates, Deputy Administrator of Science and Technology Robert Epstein, Monitoring Programs Office Director Martha Lamont, and Acting MPO Deputy Director Therese Murtagh had a productive meeting with the Fruit and Vegetable Industry Advisory (F&V) Subcommittee for Food Safety, 3rd Party Audit, Microbiology, and Traceability in Phoenix, Arizona. At the meeting, it was agreed that the F&V Committee will review MDP data and make suggestions regarding presentation and communication strategies to strengthen public outreach. AMS continues to work with the committee and values their input to the program.

8. **Encourages the use of communications or public relations assistance from internal and external sources**
   United Fresh Fruit and Vegetable Association

   AMS is pursuing the use of a consultant with expertise in the communication of complex scientific information.

9. **How is it possible that the program will provide "an understanding of the microbial ecology of fresh fruits and vegetables moving in the farm to table continuum and how it may be changing over time" based on the current program's structure?**
   International Fresh-cut Produce Association

AMS is focusing on the wholesale point in the distribution chain where sampling can be related to availability of produce proportional to all sources in the marketplace. The resulting data will determine whether AMS needs to evaluate any additional or alternative sampling regimens.

10. How can MDP data establish national exposure rates? The current plan does not provide for obtaining a statistically valid composite sample for any particular commodity, which would be based on production volumes by region. Data generated does not reflect what a statistical average US consumer would potentially consume on a per capita basis.
International Fresh-cut Produce Association

MDP conducts sample collection in 10 States that represent more than half the Nation's population and all regions of the country. The MDP sampling frame is designed to take into account regional diversity, population, and consumption on a national scale. Sampling is apportioned according to population of the participating State; that is, the higher the population in the State, the more samples that are taken. Distribution centers and terminal markets in each State are selected at random based on probability proportional to the site's distribution volume (that is, the amount of produce that moves through the site). In this manner, sites located near larger population centers have higher volumes and therefore are more likely to be selected than sites with smaller volume.

MDP limits its data collection to sites in a predetermined set of representative States from which national exposure rates can be modeled. The availability of produce in these 10 States and adjacent States in their direct distribution network is no different from that in the rest of the United States, and therefore the participating States represent the United States as a whole. We believe that over time the MDP samples will roughly reflect what is available to the U.S. consumer and thus MDP estimates will adequately measure national trends. Therefore, although MDP data may not be assumption-free, they are statistically defensible.

11. Data are being collected midstream and cannot be used to assess risk when upstream and downstream handling conditions are unknown.
International Fresh-cut Produce Association

We agree that these data will reflect the status of the produce sampled at the wholesale point in the food distribution chain.

12. To assume that all microbial contamination of produce occurs on the farm would be an error in interpretation of the data and lead to an inaccurate judgment of the safety of the produce.
International Fresh-cut Produce Association

We agree and have never stated that all microbial contamination occurs on the farm. MDP data will lend evidence to support what level of contamination, if any, has occurred up to the wholesale level.

13. A difference between MDP and PDP is that the level of a microorganism in food can change, while chemical concentrations usually remain constant. For example, heating a food immediately before consumption can reduce pathogen levels to a negligible risk.
International Fresh-cut Produce Association

Both pesticide and microbial concentrations change over time through the food distribution chain and through processing of the commodity. All of the commodities currently in MDP are produce that can be consumed uncooked and therefore any reduction due to heating does not apply.

14. Do we have a Memorandum of Understanding (MOU) or other written instrument concurred that a meaningful assessment of produce safety can be accomplished by the MDP as currently structured? Why have the Centers for Disease Control (CDC) initiated another study (Microbial Contamination of Produce: A Field Study of the Lower Rio Grande Valley)?
International Fresh-cut Produce Association

We have worked closely with the Food and Drug Administration and the Centers for Disease Control and Prevention in developing the MDP Program. The objectives of the CDC study are different from MDP, as the CDC study is looking at produce in the fields and packing sheds in the Lower Rio Grande Valley. Each of these studies will provide another piece of the picture regarding microbial concentrations on foods. USDA and the other federal agencies have verbal agreements regarding uses of the data.

15. How will the success of the MDP be measured?
International Fresh-cut Produce Association

As with all Federal programs, Congress will determine if MDP meets its goals when it assesses the program's annual Government Performance and Results Act (GPRA) requirements.

16. How will this (program or data) help growers, handlers, processors and consumers make better informed produce food safety decisions?
International Fresh-cut Produce Association

The purpose of MDP is to provide data that have not previously been available to industry, public health authorities, and others. At this point it is premature to speculate on what the MDP data will show. Moreover, based on these new data, it will be the responsibility of public health authorities, working with industry, to determine whether or to what extent additional efforts may be needed.

17. IFPA recommends the formation of a working group of stake holder to coordinate risk to consumers to communicate risk benefits to the public.
International Fresh-cut Produce Association

The Secretary of Agriculture has established a 20-member Fruit and Vegetable Industry Advisory (F&V) Committee. The purpose to this group is to examine the issues faced by the fruit and vegetable industry and offer the Secretary advice on how USDA can tailor its programs to meet the fruit and vegetable industry's needs. MDP is working with the F&V Committee to develop and refine the program, including communication of MDP results to the public.

18. IFPA requests that the government harmonize food safety data collection initiatives.
International Fresh-cut Produce Association

This request is beyond the scope of the Program, but it does have merit. It might more appropriately be addressed by the Food and Drug Administration, which has regulatory authority for fresh fruits and vegetables. Currently, Congress has directed that MDP data be collected. AMS has been tasked with implementing the MDP program and is working with other Federal agencies in an effort to coordinate and share information.

19. IFPA supports the use of modern microbiological testing techniques to enhance the quality and/or safety of fresh produce. Generic evaluations do not serve as an indicator of product quality or safety.
International Fresh-cut Produce Association

Food microbiology has incorporated many rapid testing methods, but cultural methods such as those specified in the FDA Bacteriological Analytical Methods Manual (BAM) remain the standard for the discipline. However, MDP is using state-of-the art diagnostic techniques when the data so obtained can be proven with validation studies that meet MDP Quality Assurance (QA) standards. For *Salmonella* analyses, MDP is currently using an enzyme-linked fluorescent immunoassay and is investigating the use of a polymerase chain reaction technique. MDP analytical methods are published at http://www.ams.usda.gov/science/mpo/SOPs.